Author index

A
Abaca P., 300
Abriouel H., 331
Adams M.R., 189
Aiken G.E., 583
Al Jassim R.A.M., 386
Al-Ajmi D., 386
Ali S.S., 94
Aloui F., 405
Amezcua-Allieri M.A., 296
Anand S., 59
Arshad M., 155
Arshad R., 94

B
Bae J.T., 501
Baganz F., 375
Balakrishna K., 149
Bania J., 315
Baroni C.H., 631
Barros G., 560
Bastos M.C.F., 215
Batagov A., 375
Bates J., 350, 438
Batra H.V., 149
Bayliss J., 438
Belicová A., 553
Ben Omar N., 331
Benallaoua S., 235
Bengmark S., 19
Berg T., 624
Bernaerts K., 507
Bernini V., 338
Biswas D., 432
Blockhuys F., 121
Boechat J.U.D., 30
Bolder N.M., 144
Borgo F., 254
Bouzari S., 445
Brandelli A., 381
Bremer P.J., 83
Brevis P., 300
Brežná B., 15
de Bruijn F.J., 172
Bruno E., 24
Burnett R., 567
Bystron J., 315

C
Cadot P., 160
Carter J.N., 490
Casalinuovo I.A., 24
Cavaglieri L.R., 179
Cebrián J.A., 573
Ceotto H., 215
Chalova V., 265
Chang L.Y., 210
Chao W.L., 115
Chen J., 642
Chen Y., 132
Chiotta M.L., 560
Choi S.S., 452
Choo J.H., 637
Chrzanowska J., 315
Chulze S., 560
Ciani M., 248
Clements W.D.B., 19
Cogan T.M., 425
Coletta M., 24
Collins A.M., 284
Collins R.P., 83
Comitini F., 248
Cooksey D.A., 514
Cortez D.V., 321

D
Dabrowska A., 315
Dalcero A.M., 179
Darius S., 138
Date M., 66
Davies C.E., 418
Davis J.A., 606
De Reu K., 144
Debevere J., 144
Delaquis P.J., 289
Delignette-Muller M.-L., 102
Denis C., 160
Denman S.E., 386
Dhouib A., 405
Di Francesco P., 24
Di Pierro D., 24
Diamond T., 19
Direito G.M., 179
Doerner K.C., 527
Dooley J.S.G., 7
Doyle M.P., 642
Duarte R.T.D., 631
Dumke R., 48
Dušinský R., 553

E
Ebringer L., 553
Edrington T.S., 583
Elborn J.S., 617
Elen O., 544
Elisha B.G., 600
Ellouz M., 405
Epifanio S., 465
Esaki H., 648
Evans P.N., 222

F
Farooq S., 94
Farrah S.R., 606
Federighi M., 357
Field A.M., 418
Fitzgerald G.F., 425
Flores R., 583
Foerst P., 271
Fondevila M., 573
Fortina M.G., 254
Fraga M.E., 179
Fu C.J., 490
de la Fuente G., 573
Fukamachi T., 195
Fungaro M.H.P., 631
Furlaneto L., 631
Furlaneto M.C., 631

G
Gálvez A., 331
Garijo P., 465
Gatti M., 338
Geise H.J., 121
Gerez C.L., 459
Ghosh S., 35
Giambiagi-deMarval M., 215
Gilbert R.A., 386
Gomes A.M., 595
Grant I.R., 305
Gray B., 438
Grijspeerdt K., 144

Guillouet S.E., 363
Guo T., 369
Gutiérrez A.R., 465

H
Haibin W., 344
Hailstones D.L., 624
Hall K.E., 532
Hampson D.J., 284
Han K.S., 452
Haryanti T., 210
Hashimoto K.-I., 471
Hata H., 127
Hata S., 127
Herman L., 144
Heyndrickx M., 144
Hirata A., 277
Hirosawa H., 277
Hocking A.D., 326
Holah J.T., 532
Hoper M., 19
Horinouchi S., 471
Hubert E., 300
Hwang J.-K., 400, 637

I
Ieven M., 121
Iijima K., 392
Imase M., 538
Iqbal N., 94
Ishihara K., 648
Itaya H., 66

J
Jacobs E., 48
Jacobsen J.N., 363
Jayamanne V.S., 189
Jingfan X., 344
Joblin K.N., 222
Jorens P., 121
Jugiau F., 357
Jurkovič D., 553

K
Kaclíková E., 15
Kaeriyama M., 195
Kajander E.O., 549
Kataoka M., 471
Katouli M., 350, 438
Kawanishi M., 648
Kawasaki H., 471
Kayakent N., 78
Kerley M.S., 490
Kijima M., 648
Kikuchi Y., 66
Kim H., 229
Kim M.K., 495
Kim S., 229
Kim S.H., 452
Kim S.W., 501
Kim Y., 452
Kitakaze A., 195
Klemsdal S.S., 544
Kobayashi H., 195
Kojima A., 648
Komninou G., 71
Kongo J.M., 595
Korzekwa K., 315
Krabben P., 375
Krajčovič J., 553
Krascsenicsová K., 15
Križková L., 553
Kuchta T., 15
Kudo A., 127
Kulozik U., 271
Kumar S., 149
Kurmayer R., 412
Kuzina L.V., 514

L
La T., 284
de Lajudie P., 235
Lal B., 483
Lambert P.A., 185
Lao Q., 195
Lastovica A.J., 600
Lazzi C., 338
Lee M., 495
Lee S.H., 259
Lee S.-T., 495
Leguerinel I., 160
Leong S.L., 326
Li Y., 132, 490
Liangqi Z., 344
Lima I.G.P., 631
Lima N., 612
Lin C., 589
Lobos O., 300
Looper M.L., 583
López R., 465
Lucas R., 331

M
Ma J.-F., 369
Ma Y.-L., 369
Machida K., 195
Makino H., 277
Malcata F.X., 595
Mangold M., 165
Mao Y., 642
Martínez-Cañamero M., 331
Mason B.P., 527
Matsheka M.I., 600
Matsuda M., 7
Matsui H., 66
Matthews K.R., 88
Mauer L.J., 229
Mayanagi H., 127
McBurney W., 165
McGrath J.W., 617
McSweeney C.S., 386
Medina L.F.C., 381
Melville D.S., 435
Mendonça C., 42
Miller T.A., 514
Mino T., 259
Mitra A., 35
Miyaji T., 242
Miyasawa-Hori H., 127
Moens M., 121
Molenda J., 315
Montville T.J., 54
Moore J.E., 7
Moriarty T.F., 617
Mounier J., 425
Mouret J.R., 363
Muirhead R.W., 83
Mullan A., 617
Munro K., 165

N
Nakagawa T., 242
Nakamatsu T., 471
Nandakumar K., 521
Nascimento J.S., 215
Nascimento S.B., 215
Naudts B., 121
Neviani E., 338
Nihsen M.E., 583
Niimura Y., 242
Nüsslein K., 172

O
Obika H., 521
Ogawa T., 277
Oh S., 452
Ohmura N., 538
Oksa A., 284
Oliveira P.H., 375
Oloomi M., 445
Onuki M., 259
Ooie T., 521
Oravcová K., 15
Otta Y., 242
Ozaki K., 392

© 2006 The Society for Applied Microbiology,

P
Padilla C., 300
Padmanabha J., 386
Palva A., 202
Pangallo D., 15
Papapetropoulou M., 71
Parks R.W., 19
Paterson R.R.M., 612
Peng D., 109
Perry A.L., 185
Phillips N.D., 284
Pilet M.F., 357
Podgórska B., 578
Porter J.H., 490
Putirulan F.F., 144

Q
Quan Z.-X., 495
Quinn J.P., 617

R
Raha A.R., 210
Rama F., 357
Rath H.C., 165
Rati E.R., 59
Reuhs B.L., 229
Ribeiro J.M.M., 179
Ricci G., 254
Ricke S.C., 265
Ritchie S.J., 138
Ritz M., 357
Roberto I.C., 321
Robinson W.A., 350
Rodríguez Couto S., 612
Rodríguez A., 612
Rodríguez-Vázquez R., 296
Rollán G.C., 459
Romano-Spica V., 312
Rosa C.A.R., 179
Rosenkrans Jr C.F., 583
Röske I., 48
Rowe M.T., 305
Roy S., 432
Ruan L., 109
Rukayadi Y., 400, 637
Rust S.R., 567

S
Sachan A., 35
Sahnoune M., 235
Saiki H., 538
Saito H., 195
Sami M., 392
Santamaría P., 465
Santivarangkna C., 271
Santoni D., 312
Santos K.R.N., 215
Sarma P.M., 483
Sartory D.P., 418
Sasaki K., 538
Satoh H., 259
Savijoki K., 202
Sayadi S., 405
Schaffner D.W., 54
Schober E., 412
Schröter-Bobsin U., 48
Schultz M., 165
Scott E.S., 326
Sebbane N., 235
Sehgal S.C., 432
Serra R., 42
Shaharoona B., 155
Shivakumar S., 477
Shortridge K.F., 435
Siekel P., 15
da Silva E.R., 30
da Silva N., 30
Singleton I., 495
Sinha J., 501
Sipat A., 210
Skillman L.C., 222
Smet A., 121
Smith S.R., 138
Snelling W.J., 7
Sohier D., 160
Sojka M., 553
Solomon E.B., 88
Srinivasaraghavan K., 483
Stanich K., 289
Stefani V., 381
Strömpl C., 222
Sugunan A.P., 432
Sun M., 109
Suokko A., 202
Suzuki K., 392
Suzuki S., 648
Swinnen I.A.M., 507

T
Takahashi T., 648
Tamura Y., 648
Tanaka H., 538
Tannock G.W., 165
Tao F., 344
Teixeira J.A., 612
Tesoriero L., 624
Thuault D., 160
Toivonen P.M.A., 289
Tomizuka N., 242
Torres A., 560
Trueba G., 432
Tsuneda S., 277
Tunney M.M., 617
Turgut T., 78
Türkel S., 78

U
Ungerfeld E.M., 567
Utsumi A., 521
Uyttendaele M., 144

V
de Valdez G.F., 459
Van Impe J.F., 507
Vantarakis A., 71
Varmanen P., 202
Venâncio A., 42
Venieri D., 71
Verhoeven J., 121
Vernozy-Rozand C., 102
Vesey G., 350
Vijayachari P., 432
Vijayendra S.V.N., 477
Vimont A., 102
Vriezen J.A.C., 172

W
Węgrzyn G., 578
Waldock R., 418
Wang H., 195
Wang L., 132
Wang R.B., 589
Ward J., 375
Watanabe K., 538
Watanabe T., 242
Wen A., 289
White J.S., 19
Wilkie A.C., 606
Willems A., 235
Wohlsen T., 350, 438
Woodward C.L., 265

X
Xu C.P., 501
Xu G., 132
Xu Z.-R., 369

Y
Yagyu K., 648
Yamashita H., 392
Yang J.K., 589
Yano T., 521
Yin C.-R., 495
Yoshida M., 471

Yoshie S., 277
You P., 369
You S., 452
Yu Z., 109
Yun J.W., 501
Yusoff K., 210

Z
Zahir Z.A., 155
Zakhia F., 235
Zappe H., 600
Zarczynska A., 315
Zhang G., 138
Zhang K.Q., 589
Zhang T., 132
Zhang Y., 132, 589
Zhao L., 54
Zhu C., 109

© 2006 The Society for Applied Microbiology,

Letters in Applied Microbiology

Edited by J.-Y. Maillard

Volume 42, 2006

Copyright © 2006 The Society for Applied Microbiology

ALL RIGHTS RESERVED

No part of this volume may be reproduced in any form, by photostat, microfilm, or any other means, without written permission from the Society

Print ISSN 0266-8254
Online ISSN 1472-765X

Published by
Blackwell Publishing Ltd
OXFORD BOSTON MELBOURNE BERLIN
COPENHAGEN TOKYO AMES

Contents

Number 42, January 2006

1 Author Guidelines

7 UNDER THE MICROSCOPE: *Arcobacter*
W.J. Snelling, M. Matsuda, J.E. Moore & J.S.G. Dooley

15 Detection and quantification of *Listeria monocytogenes* by 5′-nuclease polymerase chain reaction targeting the *actA* gene
K. Oravcová, E. Kaclíková, K. Krascsenicsová, D. Pangallo, B. Brežná, P. Siekel & T. Kuchta

19 The probiotic bacterium *Lactobacillus plantarum* species 299 reduces intestinal permeability in experimental biliary obstruction
J.S. White, M. Hoper, R.W. Parks, W.D.B. Clements, T. Diamond & S. Bengmark

24 Experimental use of a new surface acoustic wave sensor for the rapid identification of bacteria and yeasts
I.A. Casalinuovo, D. Di Pierro, E. Bruno, P. Di Francesco & M. Coletta

30 Coagulase gene polymorphism of *Staphylococcus aureus* isolated from goat mastitis in Brazilian dairy herds
E.R. da Silva, J.U.D. Boechat & N. da Silva

35 Biotransformation of *p*-coumaric acid by *Paecilomyces variotii*
A. Sachan, S. Ghosh & A. Mitra

42 Fungi and ochratoxin A detected in healthy grapes for wine production
R. Serra, C. Mendonça & A. Venâncio

48 Detection of phages carrying the Shiga toxin 1 and 2 genes in waste water and river water samples
R. Dumke, U. Schröter-Bobsin, E. Jacobs & I. Röske

54 Evidence for quorum sensing in *Clostridium botulinum* 56A
L. Zhao, T.J. Montville & D.W. Schaffner

59 An enzyme-linked immunosorbent assay for monitoring of *Aspergillus ochraceus* growth in coffee powder, chilli powder and poultry feed
S. Anand & E.R. Rati

66 Secretion of human epidermal growth factor by *Corynebacterium glutamicum*
M. Date, H. Itaya, H. Matsui & Y. Kikuchi

71 Differentiation of faecal *Escherichia coli* from humans and animals by multiple antibiotic resistance analysis
A. Vantarakis, D. Venieri, G. Komninou & M. Papapetropoulou

78 Effect of osmotic stress on the derepression of invertase synthesis in nonconventional yeasts
S. Türkel, T. Turgut & N. Kayakent

Number 42, February 2006

83 Numbers and transported state of *Escherichia coli* in runoff direct from fresh cowpats under simulated rainfall
R.W. Muirhead, R.P. Collins & P.J. Bremer

88 Interaction of live and dead *Escherichia coli* O157:H7 and fluorescent microspheres with lettuce tissue suggests bacterial processes do not mediate adherence
E.B. Solomon & K.R. Matthews

94 Mutagenic effect of acridine orange on the expression of penicillin G acylase and β-lactamase in *Escherichia coli*
R. Arshad, S. Farooq, N. Iqbal & S.S. Ali

102 Isolation of *E. coli* O157:H7 and non-O157 STEC in different matrices: review of the most commonly used enrichment protocols
A. Vimont, C. Vernozy-Rozand & M.-L. Delignette-Muller

109 Vegetative insecticidal protein enhancing the toxicity of *Bacillus thuringiensis* subsp *kurstaki* against *Spodoptera exigua*
C. Zhu, L. Ruan, D. Peng, Z. Yu & M. Sun

115 Evaluation of Colilert-18 for the detection of coliforms and *Escherichia coli* in tropical fresh water
W.L. Chao

121 Fast identification of ten clinically important micro-organisms using an electronic nose
M. Moens, A. Smet, B. Naudts, J. Verhoeven, M. Ieven, P. Jorens, H.J. Geise & F. Blockhuys

127 Quantitative detection of *Streptococcus mutans* in the dental plaque of Japanese preschool children by real-time PCR
S. Hata, H. Hata, H. Miyasawa-Hori, A. Kudo & H. Mayanagi

132 Disruption of *ste*23 gene affects composition profile and bioactivity of exopolysaccharide produced by *Streptomyces* sp. 139
T. Zhang, L. Wang, G. Xu, Y. Chen, Y. Zhang & Y. Li

138 *In vitro* inhibitory effect of hen egg white lysozyme on *Clostridium perfringens* type A associated with broiler necrotic enteritis and its α-toxin production
G. Zhang, S. Darius, S.R. Smith & S.J. Ritchie

144 The effect of a commercial UV disinfection system on the bacterial load of shell eggs
K. De Reu, K. Grijspeerdt, L. Herman, M. Heyndrickx, M. Uyttendaele, J. Debevere, F.F. Putirulan & N.M. Bolder

149 Detection of *Salmonella enterica* serovar Typhi (*S.* Typhi) by selective amplification of *invA*, *viaB*, *fliC-d* and *prt* genes by polymerase chain reaction in mutiplex format
S. Kumar, K. Balakrishna & H.V. Batra

155 Effect of plant growth promoting rhizobacteria containing ACC-deaminase on maize (*Zea mays* L.) growth under axenic conditions and on nodulation in mung bean (*Vigna radiata* L.)
B. Shaharoona, M. Arshad & Z.A. Zahir

160 Heat resistance of coliform species isolated from cooked ham, snail flesh, and 'bouchées à la reine'
C. Denis, P. Cadot, I. Leguerinel, D. Thuault & D. Sohier

165 PCR/DGGE and 16S rRNA gene library analysis of the colonic microbiota of HLA-B27/β2-microglobulin transgenic rats
W. McBurney, M. Mangold, K. Munro, M. Schultz, H.C. Rath & G.W. Tannock

172 Desiccation responses and survival of *Sinorhizobium meliloti* USDA 1021 in relation to growth phase, temperature, chloride and sulfate availability
J.A.C. Vriezen, F.J. de Bruijn & K. Nüsslein

179 Influence of water activity, temperature and time on mycotoxins production on barley rootlets
J.M.M. Ribeiro, L.R. Cavaglieri, M.E. Fraga, G.M. Direito, A.M. Dalcero & C.A.R. Rosa

Number 42, March 2006

185 UNDER THE MICROSCOPE: *Propionibacterium acnes*
A.L. Perry & P.A. Lambert

189 Determination of survival, identity and stress resistance of probiotic bifidobacteria in bio-yoghurts
V.S. Jayamanne & M.R. Adams

195 OmpC and OmpF are required for growth under hyperosmotic stress above pH 8 in *Escherichia coli*
M. Kaeriyama, K. Machida, A. Kitakaze, H. Wang, Q. Lao, T. Fukamachi, H. Saito & H. Kobayashi

202 New convenient defined media for [^{35}S]methionine labelling and proteomic analyses of probiotic lactobacilli
K. Savijoki, A. Suokko, A. Palva & P. Varmanen

210 Expression of a thermostable *xylanase* gene from *Bacillus coagulans* ST-6 in *Lactococcus lactis*
A.R. Raha, L.Y. Chang, A. Sipat, K. Yusoff & T. Haryanti

215 Bacteriocins as alternative agents for control of multiresistant staphylococcal strains
J.S. Nascimento, H. Ceotto, S.B. Nascimento, M. Giambiagi-deMarval, K.R.N. Santos & M.C.F. Bastos

222 16S rDNA directed PCR primers and detection of methanogens in the bovine rumen
L.C. Skillman, P.N. Evans, C. Strömpl & K.N. Joblin

229 Differentiation of outer membrane proteins from *Salmonella enterica* serotypes using Fourier transform infrared spectroscopy and chemometrics
S. Kim, H. Kim, B.L. Reuhs & L.J. Mauer

235 Phenotypical and genotypical characteristics of root-nodulating bacteria isolated from annual *Medicago* spp. in Soummam Valley (Algeria)
N. Sebbane, M. Sahnoune, F. Zakhia, A. Willems, S. Benallaoua & P. de Lajudie

242 Purification and molecular characterization of subtilisin-like alkaline protease BPP-A from *Bacillus pumilus* strain MS-1
T. Miyaji, Y. Otta, T. Nakagawa, T. Watanabe, Y. Niimura & N. Tomizuka

248 Survival of inoculated *Saccharomyces cerevisiae* strain on wine grapes during two vintages
F. Comitini & M. Ciani

254 Plasmids from *Lactobacillus helveticus*: distribution and diversity among natural isolates
G. Ricci, F. Borgo & M.G. Fortina

259 Isolation, characterization of bacteriophages specific to *Microlunatus phosphovorus* and their application for rapid host detection
S.H. Lee, M. Onuki, H. Satoh & T. Mino

265 Application of an *Escherichia coli* green fluorescent protein – based lysine biosensor under nonsterile conditions and autofluorescence background
V. Chalova, C.L. Woodward & S.C. Ricke

271 Effect of carbohydrates on the survival of *Lactobacillus helveticus* during vacuum drying
C. Santivarangkna, U. Kulozik & P. Foerst

277 Characteristics of bacteria showing high denitrification activity in saline wastewater
S. Yoshie, T. Ogawa, H. Makino, H. Hirosawa, S. Tsuneda & A. Hirata

284 Development of a multiplex-PCR for rapid detection of the enteric pathogens *Lawsonia intracellularis*, *Brachyspira hyodysenteriae*, and *Brachyspira pilosicoli* in porcine faeces
T. La, A.M. Collins, N.D. Phillips, A. Oksa & D.J. Hampson

289 Evidence of an antilisterial factor induced by wounding of iceberg lettuce tissues
P.J. Delaquis, A. Wen, P.M.A. Toivonen & K. Stanich

296 Bioavailable cadmium during the bioremediation of phenanthrene-contaminated soils using the diffusive gradients in thin-film technique
M.A. Amezcua-Allieri & R. Rodríguez-Vázquez

300 Plasmid-mediated bacteriocin production by *Shigella flexneri* isolated from dysenteric diarrhoea and their transformation into *Escherichia coli*
C. Padilla, O. Lobos, P. Brevis, P. Abaca & E. Hubert

304 Erratum

© 2006 The Society for Applied Microbiology,

Number 42, April 2006

305 UNDER THE MICROSCOPE: *Mycobacterium avium* ssp. *paratuberculosis* and its potential survival tactics
M.T. Rowe & I.R. Grant

312 A gzip-based algorithm to identify bacterial families by 16S rRNA
D. Santoni & V. Romano-Spica

315 The profiles of enterotoxin genes in *Staphylococcus aureus* from nasal carriers
J. Bania, A. Dabrowska, K. Korzekwa, A. Zarczynska, J. Bystron, J. Chrzanowska & J. Molenda

321 Effect of phosphate buffer concentration on the batch xylitol production by *Candida guilliermondii*
D.V. Cortez & I.C. Roberto

326 Effects of water activity and temperature on the survival of *Aspergillus carbonarius* spores *in vitro*
S.L. Leong, A.D. Hocking & E.S. Scott

331 Bacteriocin production, plasmid content and plasmid location of enterocin P structural gene in enterococci isolated from food sources
H. Abriouel, N. Ben Omar, R. Lucas, M. Martínez-Cañamero & A. Gálvez

338 Fluorescence microscopy for studying the viability of micro-organisms in natural whey starters
M. Gatti, V. Bernini, C. Lazzi & E. Neviani

344 Synthesis of poly (3-hydroxybutyrate-co-3-hydroxyoctanoate) by a *Sinorhizobium fredii* strain
Z. Liangqi, X. Jingfan, F. Tao & W. Haibin

350 Evaluation of the methods for enumerating coliform bacteria from water samples using precise reference standards
T. Wohlsen, J. Bates, G. Vesey, W.A. Robinson & M. Katouli

357 Inactivation of *Salmonella Typhimurium* and *Listeria monocytogenes* using high-pressure treatments: destruction or sublethal stress?
M. Ritz, M.F. Pilet, F. Jugiau, F. Rama & M. Federighi

363 Kinetic analysis of a trehalase-overexpressing strain grown on trehalose: a new tool for respiro-fermentative transition studies in *Saccharomyces cerevisiae*
J.R. Mouret, J.N. Jacobsen & S.E. Guillouet

369 Effect of *Lactobacillus* isolates on the adhesion of pathogens to chicken intestinal mucus *in vitro*
Y.-L. Ma, T. Guo, Z.-R. Xu, P. You & J.-F. Ma

375 Identification of erythrobactin, a hydroxamate-type siderophore produced by *Saccharopolyspora erythraea*
P.H. Oliveira, A. Batagov, J. Ward, F. Baganz & P. Krabben

381 An unusual reduction on the quinonoid ring of 5-amino-8-hydroxy-1,4-naphthoquinone by *Staphylococcus aureus*
L.F.C. Medina, V. Stefani & A. Brandelli

386 Evaluation of a PCR detection method for *Escherichia coli* O157:H7/H– bovine faecal samples
D. Al-Ajmi, J. Padmanabha, S.E. Denman, R.A. Gilbert, R.A.M. Al Jassim & C.S. McSweeney

392 Characterization of *horA* and its flanking regions of *Pediococcus damnosus* ABBC478 and development of more specific and sensitive *horA* PCR method
K. Suzuki, M. Sami, K. Iijima, K. Ozaki & H. Yamashita

400 *In vitro* activity of xanthorrhizol against *Streptococcus mutans* biofilms
Y. Rukayadi & J.-K. Hwang

405 Effect of bioaugmentation of activated sludge with white-rot fungi on olive mill wastewater detoxification
A. Dhouib, M. Ellouz, F. Aloui & S. Sayadi

412 Evaluation of different DNA sampling techniques for the application of the real-time PCR method for the quantification of cyanobacteria in water
E. Schober & R. Kurmayer

418 Evaluation of acid phosphatase as a confirmation test for *Clostridium perfringens* isolated from water
D.P. Sartory, R. Waldock, C.E. Davies & A.M. Field

425 Survival of surface ripening cultures during storage and monitoring their development on cheese
J. Mounier, G.F. Fitzgerald & T.M. Cogan

432 Letter to the Editor
G. Trueba, S. Roy, D. Biswas, P. Vijayachari, A.P. Sugunan & S.C. Sehgal

Number 42, May 2006

435 UNDER THE MICROSCOPE: Spread of H5N1 avian influenza virus: an ecological conundrum
D.S. Melville & K.F. Shortridge

438 Evaluation of an alternative method for the enumeration and confirmation of *Clostridium perfringens* from treated and untreated sewages
T. Wohlsen, J. Bayliss, B. Gray, J. Bates & M. Katouli

445 Comparison of polymerase chain reaction systems for detection of different *cdt* genes in *Escherichia coli* strains
M. Oloomi & S. Bouzari

452 Effects of *Lactobacillus* strains on cancer cell proliferation and oxidative stress *in vitro*
S.S. Choi, Y. Kim, K.S. Han, S. You, S. Oh & S.H. Kim

459 Gluten breakdown by lactobacilli and pediococci strains isolated from sourdough
C.L. Gerez, G.C. Rollán & G.F. de Valdez

465 Effect of the addition of inert cellulose substrates to grape must on *Saccharomyces cerevisiae* diversity and the evolution of alcoholic fermentation
R. López, S. Epifanio, P. Garijo, P. Santamaría & A.R. Gutiérrez

471 Gene expression of *Corynebacterium glutamicum* in response to the conditions inducing glutamate overproduction
M. Kataoka, K.-I. Hashimoto, M. Yoshida, T. Nakamatsu, S. Horinouchi & H. Kawasaki

477 Production of exopolysaccharides by *Agrobacterium* sp. CFR-24 using coconut water – a byproduct of food industry
S. Shivakumar & S.V.N. Vijayendra

483 Comparative analysis of phenotypic and genotypic characteristics of two desulfurizing bacterial strains, *Mycobacterium phlei* SM120-1 and *Mycobacterium phlei* GTIS10
K. Srinivasaraghavan, P.M. Sarma & B. Lal

490 Comparison of agar plate and real-time PCR on enumeration of *Lactobacillus*, *Clostridium perfringens* and total anaerobic bacteria in dog faeces
C.J. Fu, J.N. Carter, Y. Li, J.H. Porter & M.S. Kerley

495 Influence of phenol on the biodegradation of pyridine by freely suspended and immobilized *Pseudomonas putida* MK1
M.K. Kim, I. Singleton, C.-R. Yin, Z.-X. Quan, M. Lee & S.-T. Lee

501 Optimization of physical parameters for exo–biopolymer production in submerged mycelial cultures of two entomopathogenic fungi *Paecilomyces japonica* and *Paecilomyces tenuipes*
C.P. Xu, J. Sinha, J.T. Bae, S.W. Kim & J.W. Yun

507 Modelling the work to be done by *Escherichia coli* to adapt to sudden temperature upshifts
I.A.M. Swinnen, K. Bernaerts & J.F. Van Impe

514 *In vitro* activities of antibiotics and antimicrobial peptides against the plant pathogenic bacterium *Xylella fastidiosa*
L.V. Kuzina, T.A. Miller & D.A. Cooksey

521 Molecular level damages of low power pulsed laser radiation in a marine bacterium *Pseudoalteromonas carrageenovora*
K. Nandakumar, H. Obika, A. Utsumi, T. Ooie & T. Yano

527 Nutritional deprivation increases intracellular phosphate and polyphosphate in poultry litter microflora
K.C. Doerner & B.P. Mason

532 The effect of an antibacterial washing-up liquid in reducing dishwater aerobic plate counts
J.T. Holah & K.E. Hall

538 Composition of the sheath produced by the green alga *Chlorella sorokiniana*
K. Watanabe, M. Imase, K. Sasaki, N. Ohmura, H. Saiki & H. Tanaka

544 Development of a highly sensitive nested-PCR method using a single closed tube for detection of *Fusarium culmorum* in cereal samples
S.S. Klemsdal & O. Elen

Number 42, June 2006

549 UNDER THE MICROSCOPE: Nanobacteria – propagating calcifying nanoparticles
E.O. Kajander

553 Identification and characterization of enterococci from bryndza cheese
D. Jurkovič, L. Križková, R. Dušinský, A. Belicová, M. Sojka, J. Krajčovič & L. Ebringer

560 Genetic diversity in *Aspergillus parasiticus* population from the peanut agroecosystem in Argentina
G. Barros, M.L. Chiotta, A. Torres & S. Chulze

567 Effects of butyrate precursors on electron relocation when methanogenesis is inhibited in ruminal mixed cultures
E.M. Ungerfeld, S.R. Rust & R. Burnett

573 Effect of the cryopreservation conditions on the viability of the rumen ciliate *Diploplastron* (*Metadinium*) *affine*
G. de la Fuente, J.A. Cebrián & M. Fondevila

578 A modified *Vibrio harveyi* mutagenicity assay based on bioluminescence induction
B. Podgórska & G. Węgrzyn

583 Prevalence of *Escherichia coli* O157:H7 and *Salmonella* in beef steers consuming different forage diets
M.L. Looper, T.S. Edrington, R. Flores, C.F. Rosenkrans Jr, M.E. Nihsen & G.E. Aiken

589 Purification and characterization of an extracellular serine protease from the nematode-trapping fungus *Dactylella shizishanna*
R.B. Wang, J.K. Yang, C. Lin, Y. Zhang & K.Q. Zhang

595 Manufacturing of fermented goat milk with a mixed starter culture of *Bifidobacterium animalis* and *Lactobacillus acidophilus* in a controlled bioreactor
J.M. Kongo, A.M. Gomes & F.X. Malcata

600 The use of $(GTG)_5$ oligonucleotide as an RAPD primer to type *Campylobacter concisus*
M.I. Matsheka, A.J. Lastovica, H. Zappe & B.G. Elisha

606 Selective growth of *Staphylococcus aureus* from flushed dairy manure wastewater using acriflavine-supplemented mannitol salt agar
J.A. Davis, S.R. Farrah & A.C. Wilkie

612 Laccase activity from the fungus *Trametes hirsuta* using an air-lift bioreactor
S. Rodríguez Couto, A. Rodríguez, R.R.M. Paterson, N. Lima & J.A. Teixeira

617 Effect of reduced pH on inorganic polyphosphate accumulation by *Burkholderia cepacia* complex isolates
T.F. Moriarty, A. Mullan, J.W. McGrath, J.P. Quinn, J.S. Elborn & M.M. Tunney

624 A multiplex real-time PCR assay for detection of *Xanthomonas campestris* from brassicas
T. Berg, L. Tesoriero & D.L. Hailstones

© 2006 The Society for Applied Microbiology,

631 Transformation of the entomopathogenic fungus *Paecilomyces fumosoroseus* with *Agrobacterium tumefaciens*
I.G.P. Lima, R.T.D. Duarte, L. Furlaneto, C.H. Baroni, M.H.P. Fungaro & M.C. Furlaneto

637 Inhibition of bacterial quorum sensing by vanilla extract
J.H. Choo, Y. Rukayadi & J.-K. Hwang

642 Role of colanic acid exopolysaccharide in the survival of enterohaemorrhagic *Escherichia coli* O157:H7 in simulated gastrointestinal fluids
Y. Mao, M.P. Doyle & J. Chen

648 Drug resistance and random amplified polymorphic DNA analysis of *Photobacterium damselae* ssp. *piscicida* isolates from cultured *Seriola* (yellowtail, amberjack and kingfish) in Japan
M. Kawanishi, M. Kijima, A. Kojima, K. Ishihara, H. Esaki, K. Yagyu, T. Takahashi, S. Suzuki & Y. Tamura

654 Corrigendum

655 Index